

KRIZEK, J

TECHNOLOGY

Periodicals: ELEKTROTECHNIK Vol. 14, no. 3, Mar. 1959

KRIZEK, J. Digital and analogue computers in science and technology. p. 75

Monthly List of East European Accessions (FFAI) IC, Vol. 8, No. 5,  
May 1959, Unclass.

KRIZEK, J.: FRANK, H.

National conference on semi-conductors in Roznov pod Radhestem. p. 598

SLABOPROUDY OBZOR (Ministerstvo vseobecného strojírenství, Ministerstvo spojení a Československá vědecko-technická společnost, sekce elektrotechnika) Praha, Czechoslovakia, Vol. 20, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2, Feb. 1960

Uncl.

KRIZEK, Jaroslav

"Regulators and regulation methods in communication engineering"  
by G.Hassler and E.Holzer. Reviewed by Jaroslav Krizek. El tech  
obzor 48 no.5:281-282 My '59.

1. Ustav teorie informace an automatizace, Ceskoslovenska akademie  
ved.

KRIZEK, Jiri

Syndrome of tactile hallucinations, "delusions of infestation".  
Cesk. psychiat. 48 no.1:52 F '62.

1. Psychiatricka lecebná, Horní Berkovice.  
(HALLUCINATIONS)

L 26020-66

ACC NR: AP6000077

SOURCE CODE: CZ/0070/65/000/009/0276/0277

AUTHOR: Křížek, Milan (Gottwaldov)

ORG: National Enterprise (Národní Podnik, Gottwaldov, Svit)

TITLE: Synthetic covering materials and methods of creating porosity

SOURCE: Kozarství, no. 9, 1965, 276-277

TOPIC TAGS: synthetic material, clothing, porosity

ABSTRACT: The article reviews data drawn from foreign (non-Czech) literature on the research which has been in progress and is being done to develop synthetic materials for the tops (coverings, trimmings) of shoes, and discusses the properties, advantages and drawbacks of certain brand name materials, some of them almost indistinguishable from natural tanned hides and leather produced in the USA and elsewhere. Various approaches to the solution of the outstanding problems in developing a suitable synthetic material for shoes are discussed.

SUB CODE: 11,05/ SUBM DATE: none

Card 1/1

KRIZEK, Milan

Corfam and its properties. Kozarstvi 14 no. 3: 80-82  
Mr '64.

1. Svit National Enterprise, Gottwaldov.

KRIZEK, Milan

Symposium on rubber processing. Kozarstvi 14 no. 6:172-173  
Je '64.

1. Svit National Enterprise, Gottwaldov.

FRIZEK, M.

"Engines for the Ruling of Diffraction Gratings" P. 72  
( CESKOSLOVENSKY CASOPIS PRO FYSIKU Vol. 4, No. 1, Feb. 1954 - Praha, Czech. )

SO: Monthly List of East European Accessions, (EFAL), LC, Vol.4, No. 4,  
April 1955, Uncl.



KRIZEK, M.

Electrostatic rotation voltmeter for measuring high-voltage direct current. p. 406

Vol. 5, no. 4, July 1955  
CESKOSLOVENSKY CASOPIS PRO FYSIKU  
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

Z/032/62/000/003/001/001  
E073/E335

AUTHOR: Křížek, M., Candidate of Sciences

TITLE: A helium-liquefier operating at the Institute for  
Solid-state Physics of CSAV

PERIODICAL: Strojírnoství, no. 3, 1962, 231 - 232

TEXT: The here described helium-liquefier is of a classical design and was manufactured by the firm, Linde; it is the 1959 model. Essentially it is a type developed by Professor Meissner during 1936-1940, using liquid air for pre-cooling of the compressed helium. Further cooling of the helium to 1 400 °K is achieved by a piston-expansion mechanism so that no liquid hydrogen is required. The equipment is housed in two 3.5 x 6 m rooms. The gaseous helium is stored in flasks with an internal pressure of up to 120 atm. The equipment is suitable for European conditions and can be operated by a single qualified person. There are 2 figures.

ASSOCIATION: Ústav fyziky pevných látek, Praha (Institute of  
Solid-state Physics, Prague)

Card 1/1

KRIZEK, Milan

"Optics" by Josef Fuka and Bedrich Havelka. Reviewed by  
Milan Krizek. Pokroky mat fyz astr 7 no.4:248-249 '62.

KRIZEK, M.

Polarization of nonparallel rays of infrared radiation by reflection. Chekhosl fiz zhurnal 13 no.8:596-610 '63.

1. Ustav fyziky pevných látek, Československá akademie věd, Praha.

KRIZEK, M.

Some variations of infrared polarizers using reflection from germanium. Chekhosl fiz zhurnal 13 no.9:683-691 '63.

1. Ustav fyziky pevnych latek, Ceskoslovenska akademie vod, Praha.

ACCESSION NR: AP3005956

Z/0055/63/013/008/0599/0610

AUTHOR: Krizek, M.

TITLE: Polarization of non-parallel rays of infra-red radiation by reflection

SOURCE: Chokhoslovatskiy fizicheskiy zhurnal, v. 13, no. 8, 1963, 599-610

TOPIC TAGS: polarization, infra-red radiation, reflection, infra-red ray, radiation, radiation purity, mirror, germanium mirror, Brewster angle, divergence angle, electromagnetic wave, refraction, refractive index, germanium

ABSTRACT: A study was made of the possibilities of polarizing strongly divergent or convergent beams of infra-red rays from the point of view of the purity of the radiation obtained, the efficiency of the process, and the required dimensions of the germanium mirrors. A polarizer was sought for studying the optical properties of solids which was suitable for use from the near to the far infra-red region, depended very little on the wave length, was able to treat divergent beams with a high degree of polarization, and at the same time had a favorable energy efficiency and good time constancy. This study was a continuation of the work of D. F. Edwards and M. J. Bruemmer (J.O.S.A. 49(1959),860), who measured the polarizing qualities of germanium in the infra-red region. The problem was

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ACCESSION NR: AP3005956

solved by using a double reflection on germanium mirrors with different angles of incidence in the neighborhood of the Brewster angle. These arrangements were able to treat infra-red radiation in a range of 2 to 100  $\mu$ , according to the quality of the germanium used. The volume of radiation of the undesirable direction of vibration could be smaller than 1% for a solid angle of the divergent beam of  $20^\circ \times 70^\circ$ . It was found that the efficiency of these arrangements is about 60% of the ideal value, and the use of germanium is very economical. These arrangements gave very good values for these different characteristic properties so that a solid divergence angle of almost two orders larger than in the visible region provided by a classical polarizer-- Nicol's prism-- could practically be obtained when the inlet cross-section was sufficiently small or the germanium mirrors sufficiently large. This method is suitable for all ranges of electromagnetic waves where it is possible to use a refractive index between 2.5 and 6. "The author is greatly indebted to Dr. J. Taus for instigating this study." Orig. art. has 21 formulae, 3 figures, and 3 tables.

ASSOCIATION: Ustav fyziky pevných látek CSAV, Prague (Institute of Solid State Physics, CSAV)

SUBMITTED: 29Nov62

SUB CODE: OP, SS

Card 272

DATE ACQ: 26Aug63

NO REF SOV: 000

ENCL: 00

OTHER: 004

ZBORILEK, Josef; KRIZEK, Milan

Semiautomatic line for weighing, kneading, and further  
processing of rubber mixtures for shoemaking in the Svit  
National Enterprise, Gottwaldov. Kozarstvi 14 no. 4:100-106  
Ap '64.

1. Svit National Enterprise, Gottwaldov.



BRITISH, Milan

Continuous kneading of rubber mixtures. Kozarstvi 14  
no.10:300-303, 304. O '64.

1. Svit National Enterprise, Gottwaldov.

KRIZEK, Milan

Swiss shoe industry. Kozarstvi 14 no.11:336 N '64.

1. Svit National Enterprise, Gottwaldov.

CZECHOSLOVAKIA/Chemical Technology. Chemical  
Products and Their Applications.  
Pharmaceuticals. Vitamins. Anti-  
biotics.

H-17

Abs Jour : Ref Zhur-Khiniya, No 7, 1959, 24485

Author : Hodinar, F., Picha, Z., Kraus, A.,  
Krizek, P.

Inst : -

Title : Manufacturing Control and Clinical Tests  
on Czechoslovakian Streptomyces.

Orig Pub : Ceskosl. farmac., 1957, 6, No 6, 329-330

Abstract : No abstract.

Card : 1/1

KRIZEK, V.

Tube-type walls of boilers. p. 900.  
STROJIRENSTVI, Prague, Vol. 4, no. 12, Dec. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,  
June 1956, Uncl.

KRIANEK, V.

"Liquid metals, heat exchange mediums of the future." p. 664.

STROJIRENSTVI. (MINISTERSTVO TEZKEHO STROJIRENSTVI, MINISTERSTVO PRESNEHO  
STROJIRENSTVI A MINISTERSTVO AUTOMOBILOVEHO PRUMYSLU A ZEMEDELSKYCH STROJU.)  
Praha, Czechoslovakia, Vol. 5, no. 9, Sept. 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.  
Uncl.

ŠTĚPÁNEK, P; KŘÍŽEK, V.

Czechoslovakia

Research Institute for Psychiatry, Balneology and  
Climatology -- Marienbad (Výzkumný ústav pro  
fyziatrii, balneologii a klimatologii -- Mariánské  
Lázně ); Director: K. PREROVSKÝ, Prof. Dr. - (for all)

Prague, Fyziatrický Věstník, No. 5, 1962, pp 271-275

"Investigating Problems in the Treatment of Obesity  
by Physiatric Methods."

S/081/62/000/005/100/112  
B166/B101

AUTHORS: Spurník, Vladimír, Svodoba, Jirí, Krížek, Vladimír

TITLE: Plasticizers for polyvinyl butyral

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 608, abstract  
5P35 (Kaučuk a plast. hmoty, no. 3, 1961, 98-100)

TEXT: In order to establish the possibility of replacing plasticizer type Flexol 3GH by dibutyl sebacate a study has been made of the solvation rate, the degree of sweating with different plasticizer contents, the deformation at normal and elevated temperatures, and the adhesion to glass of polyvinyl butyral films. It was established that dibutyl sebacate is not suitable as a plasticizer for polyvinyl butyral, since with a content of 30% it sweats, and with a content of 18% the polyvinyl butyral film is not sufficiently elastic and is less frostproof than films plasticized with Flexol 3GH. [Abstracter's note: Complete translation.]

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KRIZEK, V.; DURSEK, F.

Nuclear energy and world power economy in the next hundred years. p.405

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenske vedecka technicka  
spolecnost pro energetiku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia  
Vol.5, no.4, Apr.1955

Monthly List of East European Accessions (LEAI) LC, Vol.8, no.11  
Nov. 1959  
Uncl.



KRIZEK, V.; DUSEK, F.

Equipment for protection of electric transformers against external defects. p.409

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenske vedecka technicka  
spolecnost pro energetiku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia  
Vol.5, no.4, April.1955

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.1

Nov. 1959

Uncl.

KRIZEK, V.; DUPSEK, F.

Driving ships by nuclear energy. p.110

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenske vedecka technicka  
spolecnost pro energetiku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia  
Vol.5, no.4, Apr. 1955

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.11  
Nov. 1959  
Uncl.

KRIZEK, V.; DUBSEK, F.

Gas turbines in the production of electricity. p.411

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenske vedecka technicka spolecnost  
pro energetiku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia  
Vol.5, no.4, Apr. 1955

Monthly List of East European Accessions (EEAI) LC, Vol.6, no.11, Nov. 1959, Uncl.

STEPANEK, J.; SALUSEK, L.; KRAL, V.

L-Thyrodthyronine (Tertroxin glaxo) in the treatment of obesity.  
Cas. lek. cesk. 103 no.42:1170-1171 0 16 '64.

1. Vyzkumny ustav pro fyziatru, balneologii a klimatologii v  
Marianskych Laznich (reditel prof. dr. K. Prerovsky).

STEPANEK, P.; SADILEK, L.; KRIZEK, V.

Protein-anabolic steroids in the treatment of obesity.  
Cesk. gastrocent. vyz. 19 no.5:319-321 J1 '65.

1. Vyskumny ustav pro fysiatrici, balneologii a klimatologii  
v Mar. Laznich (reditel prof. dr. K. Prerovsky).

KRIZEK, V.

Hyperuricemia and body weight. Cas. lek. Cesk. 104 no.45:  
1246-1248 12 N '65.

1. Vyzkumny ustav pro fyziatrii, balneologii a klimatologii v  
Marianskych Laznich (reditel prof. dr. K. Prerovsky).

CZECHOSLOVAKIA UDC 616.633(:547.587.43):616-003.829.7:616.633  
(547.587.21)-074

KRIZEK, V.; JIRKA, M.; SADILEK, L.; Research Institute for Phys-  
iatry, Balneology, and Climatology (Vyzkumny Ustav pro Fyziatrii,  
Balneologii a Klimatologii), Mariánské Lázně, Director (Reditel)  
Prof Dr K. PREROVSKY; Institute for Investigation of Child Evolu-  
tion, Pediatric Clinic, Charles University (Ustav Vyzkumu Vyvoje  
Dítěte Fakulty Dětského Lékarství KU), Prague, Director (Reditel)  
Prof Dr J. HOUSTEK.

"Contribution to the Mechanism of Excretion of Homogentisic and Gen-  
tistic Acids by Kidneys."

Prague, Casopis Lékarů Českých, Vol 105, No 30, 15 Jul 66, pp  
793 - 798

Abstract [Authors' English summary modified]: The mechanism was  
investigated in 6 patients with al apatonia. Homogentisic acid  
is excreted by glomerular filtration and tubular secretion and cor-  
responds to the clearance of p-aminohippuric acid. Benemid reduces  
the excretion. Gentisic acid is reabsorbed by the tubules, thereby  
differing from the mechanism shown by homogentisic acid. Its trans-  
port through the tubular cells proceeds in the opposite direction.  
4 Figures, 5 Tables, 11 Western, 15 Czech, 3 Japanese references.  
1/1 (Ms. rec. Mar 66).

CZECHOSLOVAKIA

UDC 613.24-092.6

KRIZEK, Vladimír, Dr; STEPANEK, Pavel, Dr; SADILEK, Ludvík, Dr;  
Research Institute for Physiatry, Balneology, and Climatology  
(Vyzkumny Ustav pro Fyziatrii, Balneologii a Klimatologii), Ma-  
riánské Lázně, Director (Reditel) Prof Dr K. PREROVSKY.

"Some Changes During a Fast or Several Days in Men."

Prague, Vojenské Zdravotnické Listy, Vol 36, No 1, Feb 67, pp  
23 - 26

Abstract: Experiments were conducted on a group of 25 men who re-  
ceived no food at all for 3 days; the intake of water was not  
limited at all. The loss of weight averaged 3.72 kg, out of  
which 12.5% was active human body (non-fat). A great number  
of changes caused by starvation were determined. The water bal-  
ance after 3 days was positive, diuresis was slightly reduced,  
the levels of uric acid, cholesterol, and lipids in the blood  
were increased. The subjective tolerance of the test was good.  
5 figures, 1 Table, 4 Western, 2 Czech references.  
1/1

ACC NR: AP7004409

Similar results were found with bundles of three and seven tubes. Equations are derived for the geometric factor in each combination of tubes, and the deviation of experimental results from theoretic values is shown. Paper presented by J. Schneller, Engineer and Doctor of sciences. Orig. art. has: 17 formulas and 14 figures.

SUB CODE: 14, 20/ SUBM DATE: none/ ORIG REF: 002/ SOV REF: 006/ OTH REF: 011

Card 2/2



KRIZEK, V.

70 cases of cystinuria. Cesk. pediat. 19 no.3:213-216 Mr'64.

1. Vyzkumny ustav pro fyziatrii, balneologii a klimatologii  
v Marianských Lázních; ředitel: prof.dr. A. Jiršovský.

\*

SORKA, J.; KRIZEK, V.; STEPANEK, P.; KUCEROVA, M.; ZBIROVA, A.;  
ZDVINAL, J.

Muscle activity and a reducing regimen. Vnitřní lek. 11 no.3:  
245-261 Mr '65

1. Laborator pro endokrinologii a metabolismus, fakulta vše-  
obecného lékařství v Praze (prednosta akademik Josef Charvat);  
Výzkumný ústav pro fyziologii, balneologii a klimatologii,  
Marianské Lázně (prednosta: prof. Karel Prerovsky, Dr.Sc.) a  
katedra tělesné výchovy Karlovy University, Praha (vedoucí:  
doc. Jiri Jirousek).

CZECHOSLOVAKIA

KRIZEK, V; SADILEK, L.

Research Institute of Physiatrics, Balneology and Climatology (Vyskumny ustav pro fyziatrii, balneologii a klimatologii), Marianske Lazne (for both)

Prague, Vnitřní Lekarství, No 8, 1964, pp 761-763

"Alcaptonuria."

CZECHOSLOVAKIA

KRIZEK, V.

Research Institute of Physiatrics, Balneology and Climatology (Vyskumny ustav pro fyziatrii, balneologii a klimatologii), Marianске Lazne

Prague, Vnitřní Lekarství, No 8, 1964, pp 765-767

"Cystinuria."

KRIZEK, Vladimir, inz. CSc.

Highway bridge near Innsbruck in Austria. Inz stavby 12  
no. 2: 75-79 F '64.

1. Stavby silnic a zeleznic, n.p., Praha.

KRIZEK, VLADIMIR

L 18836-65 EWT(d)/EWT(m)/EPF(p)-2/EWP(c)/EWP(k)/EWP(h)/EPA(bb)-2/T/EWP(1)  
 PC-1/Pu-1 AEDC(b)/SSD  
 ACCESSION NR: AP4044865 Z/0038/64/000/009/0312/0322

AUTHOR: Hulovec, Jan (Gulovets, Ya.); Juzs, Jan (Yusa, Ya.); Komarek, Arnost;  
 Korenek, Jan (Kerzhenev, Ya.); Wagner, Karel (Wagner, K.); Krizek, Vladimir  
 (Krshishok, V.); Tomcik, Jan (Tomchik, Ya.)

TITLE: Development and construction problems of the first Czechoslovak nuclear  
 reactor power plant

SOURCE: Jaderna energie, no. 9, 1964, 312-322

TOPIC TAGS: nuclear power plant, reactor, pressure vessel, power output, fuel  
 element

ABSTRACT: This article reports on the principal scientific research which was  
 necessary in connection with the testing of the reliability of all the important  
 units of the first Czechoslovak nuclear electric power plant of 150-Mw power out-  
 put, and the present stage of the development and production of the technological  
 installations and of the construction of the power plant. The plant uses gas cool-  
 ing and a heavy-water reactor with natural metallic uranium and is being built at  
 the present time in the CSR. The relatively large output design of the Czechoslo-

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ACCESSION NR: AP4044865

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Avak plant has delayed construction as it has been necessary to design, construct, and test many parts of the technological installation with a view to much greater perfection than would have been the case were the plant of low-power output. More time will be required than originally planned to put the functional units and the whole plant into operation, since the unit of greater power was designed with a view to greater economy of operation, and has by far a more complicated construction than units whose main purpose is the testing and proving of design types in operation. Great attention has been given to the design and development of the fuel-element changing mechanisms; its individual units as well as the whole prototype mechanism have been functionally tested. The mechanisms of all the control rods and safety rods have been subjected to all-round, exhaustive testing on a special stand with models of the mechanisms of a 1:1 scale at full operating temperature and CO<sub>2</sub> coolant pressure. Many tests were made on models of the reactor shielding. Inasmuch as the technological installations of the plant are in a developmental stage, the discussion is limited to future prospects from the point of view of technical performance figures, of which the most important is the maximum unit power that can be generated. Given the fuel element concept described

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ACCESSION NR: AP4044865

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here, it is not necessary to reckon with either a sharply increased active zone height or with increased thermal power drawn from the unit volume of active zone, which is already fairly high in the first electric power plant ( $10 \text{ Mw/m}^3$ ). It may be expected, therefore, that the 200-Mw power stage will have a pressure chamber of 6.4 m average diameter, and the 400-Mw stage a pressure chamber of 8.8 m diameter. The height of the pressure chamber would not at the same time be substantially changed. The pressure chamber of the reactor of the first electric power plant cannot be transported fully assembled. It was designed, therefore, so that it could be assembled at the plant construction site. The engineering and operation reliability of the steam generator were tested on a full-scale model of one section. Adjustable blade flow control in exhaust and sealing (packing) systems was tested on a 1:1 scale blower model. The effect of thermal shock on the piping in the case of emergency reactor shutdown, and the possibility of using turbine units from classical electric power plants under the operating conditions prevailing in the nuclear plant in view of the high moisture content of the vapor, was investigated. Another nuclear electric power plant with a reactor of a 200-Mw unit power output is being designed and planned on the basis of the design and development experience discussed here. Increased unit power output of this type of

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L 18836-65  
ACCESSION NR: AP4044865

3

- reactor will obviously depend on changes in the concept of the core of the reactor itself, in particular of the fuel element. This problem is now under study.
- Orig. art. has: 19 figures.

ASSOCIATION: [Hulovec, Jusa, Komarek, Korenek, Wagner] Zavody V. I. Lenina, Pilsen (Lenin Plant); [Krisek] Prvni brnenska strojirna, Zavody Klementa Gottwalda (First Brno Machine Building Plant, Klement Gottwald Plant); [Tomcik] Jaderna elektraren (Nuclear Electric Power Generating Plant)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 009

Card 4/4

KRIZEK, Vladimir, inz. CSK.

Spiral Highway tunnel in Norway. Inz story 12 no. 71323-325  
J1\*64.

KRIZEK, Vladimir, Ing.

Steam generators for the first Czechoslovak nuclear power plant.  
Energetika Cze 14 no.7:313-315 1964

1. První brněnská strojárna, součásti Gustavůva National  
Enterprise, Brno.

KRIZEK, V.

"Can We Solve the Problem of the Construction of Ceramic Cases?", P. 2,  
(TECHNICKE NOVINY, Vol. 2, No. 8, Apr. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,  
Dec. 1954, Uncl.

KRIZEK, V. - Inzenyrske Stavby - Vol. 3. no. 4, Apr. 1955.  
Proceedings and resolution of the National Conference of Activists in  
Construction Engineering held March 7-8, 1955. p. 133.

Installation of a pressed-in reinforced-concrete exhaust pipe. p. 136.

SO: Monthly List of East European Accessions, (KEAL), LC, Vol. 4, No. 9, Sept. 1955.  
Uncl.

KRIZEK, V.

Methods for conveying a stream across a tunnel. p. 454.

INZENYRSKE STAVBY. Praha, Czechoslovakia. Vol. 3, no. 11, Nov. 1955.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960  
Uncl.

KRIZICK, V.

Concrete injections used for the insulation of underground structures. p. 141  
(Inzenyrske Stavby, Vol. 5 no. 3, March 1957) Praha

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6 no. 7, July 1957. Uncl.

KRIZEK, Vladimir, inz., C.Sc.

Push broaching of pipelines underneath the communications. Inz  
stavby 10 no.8:281-288 Ag '62.

1. Stavby silnic a zeleznic, n.p., Praha.



KRIZEK V. Vysledky mereni elektricke vodivosti krevniho sera, mozkokianho moku a tkane mozkovce Results of the measurement of electrical conductivity of blood serum, cerebrospinal fluid, and cerebral tissue Biologicke Listy 1947, 28/1 (33-40) Graphs 3 Tables I

The conductivity of human bloodserum, cerebrospinal fluid, and cerebral tissue has been measured by use of sinus currents of 500 Hz with the following results:

	Temperature	Conductivity	Means
Serum	18°	1.055-1.10 X 10 <sup>-2</sup>	1.077 X 10 <sup>-2</sup> ohm <sup>-1</sup> cm <sup>-1</sup>
	37°	1.60 -1.638 X 10 <sup>-2</sup>	1.616 X 10 <sup>-2</sup>
Cerebrospinal fluid	18°	1.315-1.383 X 10 <sup>-2</sup>	1.349 X 10 <sup>-2</sup>
	37°	1.920-2.0 X 10 <sup>-2</sup>	1.960 X 10 <sup>-2</sup>
Cerebral tissue	18°		1.0 X 10 <sup>-3</sup>
	37°		1.6 X 10 <sup>-3</sup>

During protracted flow of electric current through the head of dead men exponential decrease of resistance was found. An abridged text of this paper with all graphs is published in the Journal de Radiologie et d'Electrologie 1947, 28, (5-6) 193-195.  
Karasek - Prague

SO: Physiology, Biochemistry and Pharmacology, Section II, Vol. I, #1-6

KRIZEK, V.; KOLOMINSKY, J.

Thermal effect of ultrasonics in tissue. Cas. lek. cesk. 90 no.16:482-  
486 20 Apr 51. (CML 20:8)

1. Of the Institute for Physical Medicine and Balneology of Charles  
University (Head--Prof. F. Lenocho, M.D.).

RUZICKA, Otakar, MUDr, lekar chir. oddeleni; KRIZEK, Vladimir, MUDr,  
Lekar Balneologickeho ustavu

Measurement of changes in temperature in the kidney pelvis. Cas.  
lek.cesk. 91 no.5:142-144 1 Feb 52.

1. Z Balneologickeho ustavu v Marianskych Laznich, prednosta:  
prim MUDr Josef Mates a z experimentalni laboratore chirurgickeho  
oddeleni stat. fak. nemocnice odbocky v Praze III, prednosta:  
prim. MUDr Zdenek Vahala.

(KIDNEY FUNCTION TEST,

temperature changes in kidney pelvis, method of measure-  
ment)

(KIDNEY PELVIS, physiology,

temperature changes in funct. test, method of measure-  
ment)

(TEMPERATURE,

in kidney pelvis, changes in funct. test, method of  
measurement)

KRIZEK, V.; STARKA, J.

Determination of urine with paper indicators and their accuracy. Cas. lek. cesk. 95 no.18:493-494 54.

1. Z Polnarova ustavu, Marianske Lazne, prednosta Dr. J. Mates.

(HYDROGEN ION CONCENTRATION,  
of urine, accuracy of paper indicators. (Cz))  
(URINE,  
hydrogen ion concentration, accuracy of paper  
indicators. (Cz))

✓ The estimation of pH of urine with paper indicators and its accuracy. V. Křížek and J. Stárka (Pelná 6-stav, Mariánské Lázně, Czech.). *Časopis Lékařů Českých* 95, 493-4(1956).--The accuracy of paper pH indicators Chempol, Bittmann, Squibb, and Phan (1) in estg. the pH of urine was compared. The avs. of the true values and the corresponding standard deviations were detd. Indicator 1 with a division of 0.3 of pH unit proved the most accurate. A. Žentík

2

KRIZEK, V.

Types of nephrolithiasis in relation to the color of eyes.  
Shorn. lek. 58 no.8:222-224 Oct 56.

1. Vyskumny ustav lazensky v Marianskych Laznich, reditel  
prof. Dr. K. Prerovsky.

(KIDNEYS, calculi

color of iris in various types (Cs))

(IRIS,

color in various types of kidney calculi (Cs))

KRIZEK, V.

Somatic differences in various types of nephrolithiasis.  
Sborn. lek. 58 no.8:215-221 Oct 56.

1. Vyskumny ustav lazensky v Marianských Lázních, reditel prof.  
Dr. K. Prerovsky.

(KIDNEYS, calculi

role of body constitution, statist. (Cz))

(BODY CONSTITUTION, in various dis.

kidney calculi, statist. (Cz))

KRIZEK, Vladimir, MUDr.

Infections and nephrolithiasis. Czech. chir. 35 no.1: 47-52 Feb 56.

- 1. Vysokiny ustav lazensky. Predn.: Prof. Dr. Prochovsky, Mariánské  
Lázně. Ustav prof. Peřinová.

(KIDNEYS, calculi

with urinary tract infect., statist. (Gr.))

(URINARY TRACT, infect.

in calculi of kidneys, statist. (Gr.))



KRIZEK, Vladimir

Urinary tract infection in nephrolithiasis. Urol. polska  
8:16-19 1956.

1. Z Instytutu Balneologicznego im. prof. Pelnara, Marianske  
Lazne, CSR Kierownik: dr. J. Mates.

(URINARY TRACT, infections,  
in kidney calculi. (Pol))

(CALCULI,  
kidneys, with urinary tract infect. (Pol))

KIDNEYS, calculi  
with urinary tract infect. (Pol))

*KRIZEK Vladimir, Dr.*

KRIZEK, Vladimir, Dr.

Internist's viewpoint on diamox treatment of glaucoma. Cesk. ofth.  
13 no.5:382 Sept 57.

1. Vyskumny ustav balneologicky, pracoviste Marianske Lazne.  
(ACETAZOLAMIDE, ther. use  
glaucoma, internist's point of view (Cs))  
(GLAUCOMA, ther.  
acetazolamide, internist's viewpoint (Cs))

~~SECRET, V.~~

Gestrogel (aluminium hydroxide) in prevention of phosphate urolithiasis.  
Gen. lek. zesk. 96 no.29:920-922 12 July 57.

1. Vysokurny ustav balneologicky, pracoviste v Mariánských Lázních, red.  
prof. Dr K. Prerovsky.

(ANACID, ther. use

aluminum hydroxide gel in prev. of urinary calculi (Cz))

(URINARY TRACT. calculi

prev. with aluminum hydroxide gel (Cz))

KRIZEK, Vladimir

Mineral metabolism in alkaptonuric urolithiasis. Cas. lek. cesk.  
98 no.32-33:1028-1030 14 Aug 59

1. Vyzkumny ustav balneologicky Marianske Lazne, prednosta prof. dr.  
K. Prerovsky.

(ALKAPTONURIA, urine)  
(URINARY CALCULI, urine)  
(CALCIUM, urine)  
(POTASSIUM, urine)

KRIZEK, V.

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Balneological Research Institute (Vyzkumny ustav balenologicky)  
Marianske Lazno; Chief (Prednosta): Prof MUDr K Prerovsky

Sources: Brno, Vnitřní Lékařství, Vol VII, No 8, August 1961, pp 886-887

Data: "Verbal Association Test in the Obese"

Authors:

KRIZEK, V  
KUCEROVA, M

117

KRIZEK, V. (A-)

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees:

Affiliation: Balneological Research Institute (Vyzkumny ustav balneologicky)  
Mariánské Lázně

Source: Prague, Fyziatrický Vestník, Vol XXXIX, No 3, June 1961,  
pp 177-182

Date: "Hungarian Rheumatological Conference in Budapest, 1-3  
December 1960."

Author(s)

KRIZEK, V, Dr  
MLAVACEK, A, Dr

131

VRANESIC, Z.; KRIZEK, V.; KLAUS, E.

Neurological findings in alkaptonuria and ochronosis. Cesk. neurol.  
25 no.3:192-198 My '62.

1. Vyzkumny ustav pro fyziatrii, balneologii a klimatologii v Mar.  
Laznich, prednosta prof. MUDr. K. Prerovsky Neurologicka klinika PU  
v Olomouci, prednosta clen korespondent CSAV prof. MUDr. J. Hrbek  
Neurologicke oddeleni Cs. statnich lazni v Marianskych Laznich, pred-  
nosta MUDr. Zd. Vranesic.

(ALKAPTONURIA physiol)  
(NEUROLOGICAL MANIFESTATIONS)

JIRKA, M.; KOTAS, J.; KRIZEK, V.

Concentration of sodium, potassium and total nitrogen in perspiration from the back and axilla during thermoregulation. Cas. Lek. Cesk. 101 no.15:473-475 13 Ap '62.

1. II ustav pro chemii lecarskou KU, Praha, prednosta prof. dr. J. Sula, Ustredni laborator detske fakultni nemocnice pod Petrinem, Praha, prednosta MUDr. J. Kotas. Vyzkumny ustav balneologicky, Marianske Lazne, prednosta prof. dr. K. Prerovsky.

(SWEAT chemistry)	(POTASSIUM chemistry)
(SODIUM chemistry)	(NITROGEN chemistry)



~~ANALYST: KUBARKOV, A., KUBARKOV, J.~~

"Increase of Body Length and Weight, Growth of the Gonads, and the Sex Ratio in Perch (Perca Fluvialitisl)." p. 1-35. (VESTNIK, 1951, Praha, Czechoslovakia)

So: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954/Unclassified

✓✓  
KRIZENECKY, Jan, predsedaťel'.

Trade-union organisations grew along with the construction project. V  
pom. profaktivu 14 no.13:38-40 JI 53. (MLRA 6:6)

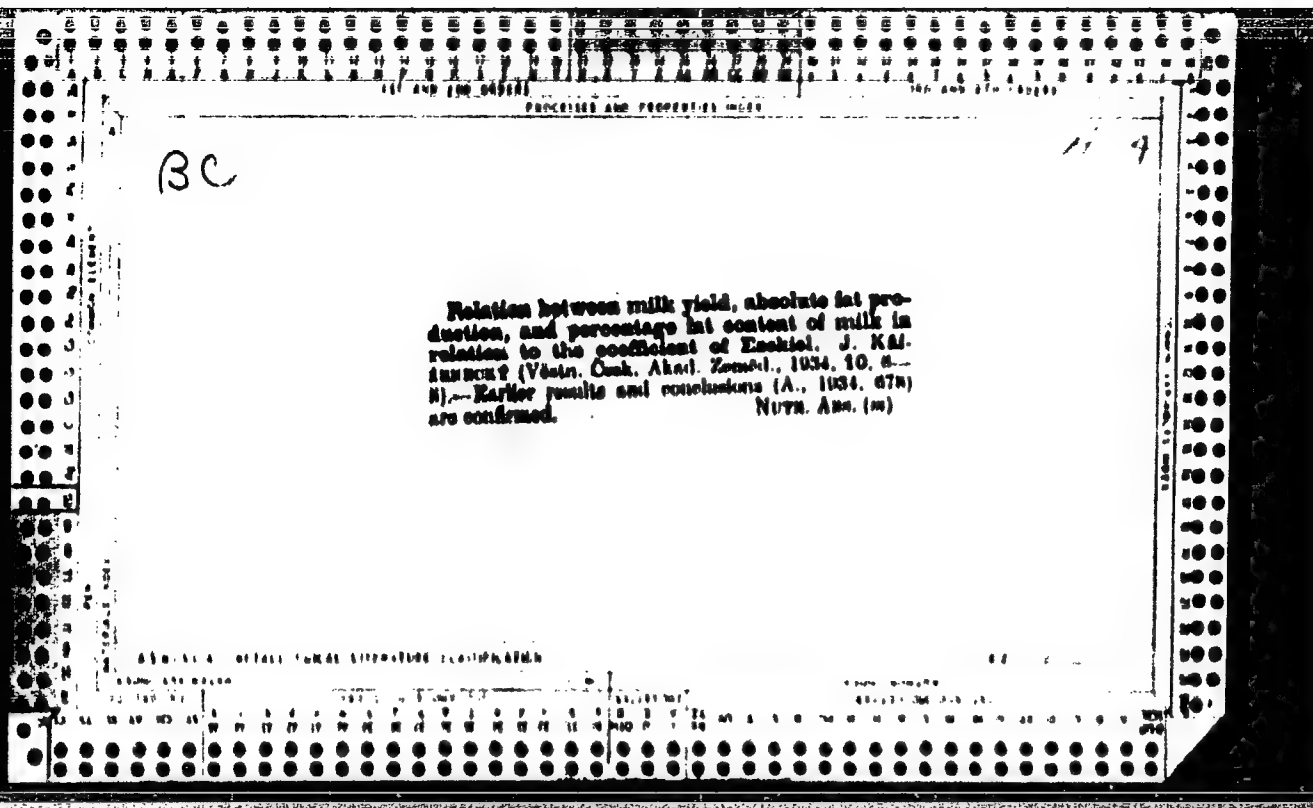
1. Komitet profesoyusa Chekhoslovatskogo metallurgicheskogo kombinata imeni  
K. Gotval'da. (Kunčice, Czechoslovakia--Steelworks)

**Vitamins and Light.** 1. Relation between rickets, ultra-violet light and the Russell effect (photoactivity) with various substances, particularly lipins. J. Káizgu.  
RCKI, Sbornik Českoslov. Akad. Zemed. 3, 607 (1928). --Photoactivity is not a characteristic of animal and vegetable fats. Photoactivation is an oxidation process, the active particles being oxidation products  
B C A

Bc

A-4

Correlation between fat content of milk and  
milk production in dairy cows. J. Kall  
Sjogren (Vet. Obit. Abstr. Scand., 1963, 9, 518-  
522). Since the correlation (I) between milk yield (II)  
and % fat content (III) is low and negative, whilst  
that between (II) and fat yield (IV) is positive and  
high, it follows that with improvement of dairy breeds  
there will be an increase of milk production and a  
consequent increase of fat production, whilst the  
fall of (III) will be considerably smaller. Hence (II)  
can serve as a basis of selection. Coeffs. of (I) between  
(IV) and (III) vary from 0.04 (Danish Red, West  
Finnish) to 0.17 for the Finnish Ayrshire and 0.22  
for 'Dorset' cattle. The average val. for ten  
breeds is 0.1083. The (I) between (II) and (IV) in  
the same breeds varies from 0.6234 (East Finnish)  
to 0.6643 (Swedish Ayrshire), with an average of  
0.6378. The ratio of the first coeff. to the second is  
on the average 1:11.7, i.e., an increase of (IV) will  
be twelve times as successful through an increase  
of (II) than of (III). NORA. Abs. (m)



18

PROCESSES AND PROPERTIES IN L.

The relation of the composition of hen egg to the size.  
 Jurekav KHMachy. *Vestnik Chelovek. Akad. Zemel'.*  
 10, 681-6 (in German 685-6) (1934).—No relation was  
 found among the amts. of protein, yolk and shell; the  
 compn. of egg is const.  
 J. Kucera

ASH-ILA METALLURGICAL LITERATURE CLASSIFICATION

The influence of a biologically proportioned mixture of magnesium, calcium, potassium, ferric, hydroxyl, carbonate, iodine and phosphate ions upon the growth of fowls. Ieronlav Khibineckii. *Viznik Krestov. Akad. Zemel'sht-10, Nov-10(1935)*; *Chem. Zentr.* 1935, I, 1239.--Feeding expts. with such a mixt. added to the ordinary feed of young hens and roosters (18 days old) were carried out for 74 days. A stimulating effect upon the general growth and the development of the secondary sexual characteristics was observed. M. G. Minor

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

CA 12

PROCESSING AND PROPERTIES INDEX

Relation among the milk yield, fat percentage and the yield of butterfat. J. Kufers, K. H. Kufers and C. M. Jantunen. *Stornia (Svea)*. Åk. 10, 234 (in English 203-5) (1965).--The yield of fat is a parabolic function of the milk yield. The max. is at a milk yield which in all cases of material examd. is far outside of the limits of normal variability of the milk yield. It is, therefore, possible to consider the relation of milk yield and butter-fat yield a straight line in the limits of the real variability of the breeds of cattle examd.

J. Kufers

ASD SLA DETAILING LITERATURE CLASSIFICATION



1st and 2nd copies										3rd and 4th copies									
<p><i>ca</i></p> <p><b>PROCESSES AND PROPERTIES INDEX</b></p> <p>The content of vitamins A and D in premier jus compared with that of beef tallow and pork lard. Jaroslav Křizenecky. <i>Chem. Listy</i> 31, 204 (1937, 114 211-212). Premier jus contained vitamins A and D in large quantities. Their content changed during the year so that at the end of spring (season of green fodder and sunlight) their doubled content persisted until the end of autumn. Approximately, the vitamin A content of premier jus was 0.3 to 0.5 that of av. butter; the vitamin D content was 0.5 that of autumn butter. During the summer months the vitamin D content of premier jus approached that of autumn butter. Since the vitamin content of premier jus was equal to that of raw beef tallow, it follows that both vitamins A and D pass from the tallow into the jus without any destruction or volatilization. Although the roasting process slightly diminished the vitamin A content of beef tallow, a careful, long heating at 100° in the lab. did not destroy any of this vitamin. However, the roasting process (carried out by butchers) or addition of hardening oils destroyed large quantities of this vitamin. The vitamin D in beef tallow was not destroyed or diminished by roasting or heating. The content of vitamin A of pork lard was 0.5 that of beef tallow; it was destroyed quickly and in large quantities by roasting or mild heating. The vitamin D content of lard was 0.5 that of autumn butter, remained const. during the year, and was not influenced by heat or treatment. Frank Marsh</p>																			
<p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p> <p>10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000</p>																			

CA

11 F

The physiological economy in milk fat production  
Jaroslav Křivánek and Mojib Chahal. *Moscow Centre  
for Food Research* 20, 04-115(1948); cf. C.I. 43,  
9264. - The utilization of digestible protein and carbo-  
hydrates in the production of 1 kg. fat in milk was studied  
mathematically when either the percentage of fat or the  
milk yield was increased. A milk compn. of 3.8% fat and  
3.2% protein and a yield of 3000 kg. were considered  
standard. When milk production increases, the fat per-  
centage is decreased. When the fat percentage increases,  
the percentages of protein and carbohydrates decrease (in  
hyperbolic curves). By increasing the fat production  
through increasing milk production, the results are re-  
versed.  
Jan Miska

12

Correlations in the composition of milk. Jagur-Gaj  
Krzyszczak and Jan Polihradsky. Sbornik Českoslo-  
venské Zemědělské 20, 321-30(1948). - A biometrical  
analysis was made on 275 milk samples from 27 cows of  
different breeds taken during lactation. Forty-five corre-  
lations between the compn. of liquid and dry milk and its  
value for manuf. of dry milk were made. The correlations  
in the liquid milk do not always correspond to the corre-  
lations in dry milk.  
Jan Miska

CA

HE

The production of milk fat in relation to the efficiency of the dairy cow. Jaroslav Křelmeček (Vysoká škola zeměp., Brno, Czech.). *Ročník Československé zeměp. 21, 200-73 (1948)*. --Previously K. and Chuchal (C. l. 44, 1944) studied the efficiency of the dairy cow in the production of milk fat in relation to cal. and proteins. Further investigations, supported by math. data based on the efficiency in cal. and proteins, indicate that it is more economical and physiologically more effective to increase the fat yield by increasing milk yield than by increasing fat percentage in the milk. Jan Mlíka

RESEARCH, ANALYSIS.

Zjistování oplozených, neplodných a neoplozených vajíček pro biologickou kontrolu línutí. Detection of fertilized, infertile and nonfertilized eggs in biological control of incubation and in testing of commercial eggs. Praha, Ministerstvo potravinářského průmyslu, 1955.  
112 p. (English summary)  
DA Not in DLC

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

ERJENECOV, J.; SANNER, J.; VANGIKOVA, J.

"The case of a hen's egg yolk containing seven embryos."

p. 60 (Biologia, Vol. 13, no. 1, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,  
September 1958

CZECHOSLOVAKIA

Jaroslav KRIZENECKY (Affiliation not stated)

"Establishment of the Gregor Mendel Department of Genetics in the Moravian Museum in Brno and its Museologic and Gene Program."

Bratislava, Biologia, Vol 17, No 12, 1962; pp 907-911.

(1) Gregor Mendel lived in the Augustinian convent in Brno from 1843 to his death in 1884; it was in the convent garden he did his pea and Hieracium experiments, published his discoveries first in 1865 in Brno Naturalists' Society Bulletin. His effects were later kept in 2 museums in Brno (convent and German Naturalists' Society). Plans call for very elaborate work on this section of the museum to be ready for the 1985 centenary International Mendel Symposium in the city.

KRIZHANIVSKIY, S.M. [Kryzhanivs'kyl, S.M.]

How the intrapharmacy relations are developed. Farmatsev. zhur. 17  
no.3:74-76 '62. (MIRA 17:10)

1. Apteka No.4 g. Poltavy.



*Krizhanovskaya M. K.*

Category: USSR/Analytical Chemistry - General Questions.

G-1

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30947

Author : Kolbovskiy Yu. Ya., Krizhanovskaya M. K.

Inst : Urals Institute of Ferrous Metals

Title : Effect of Current Intensity on Slope of Calibration Graph.

Orig Pub: Zavod. laboratoriya, 1956, 22, No 11, 1334-1335

Abstract: Experiments were carried out with standards of steel of 12-th series, prepared by the Urals Institute of Ferrous Metals. The spectra were excited in alternating current arc discharge with an operating gap of 2 mm, 10 seconds firing and with 15 seconds exposure. The upper electrode is carbon, the spectrograph is median, current intensity was varied over the range 4-7.5 a. Calibration graphs were plotted in the coordinates  $\lg I_{an}/I_{mean}$ ,  $\lg C$  according to analytical lines: Mn 2939.3 - Fe 2926/59, Si 2506.9 - Fe 2507.9, Cr 2677.1 - Fe 2684.75, Ni 3050.8 - Fe 3055.26 A. On increase of current from 4 to 5.5 a the slope of the graphs is decreased. Further increase of cur-

Card : 1/2

-21-

Category: USSR/Analytical Chemistry - General Questions.

G-1

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30947

rent intensity does not affect the slope of the graphs. Consequently, on operation according to the method of solid graph it is advantageous to utilize strong currents, while with graphs in  $\Delta S$ ,  $\lg C$  coordinates it is more advantageous to use weaker currents.

Card : 2/2

-22-

KOLBOVSKIY, Yu.Ya.; KRIZHANOVSKAYA, M.K.

Spectral determination of aluminum in alloyed brands of steel  
by making solutions. Fiz.sbor. no.4:402-403 '58.

(MIRA 12:5)

1. Nikopol'skiy yuzhnotrubby metallurgicheskiy zavod.  
(Steel--Analysis) (Aluminum--Spectra)

KRIZHANOVSKAYA, O.S. [Kryzhanovs'ka, O.S.], assistant

Effect of vitamin concentrates and certain yeasts on the quality of  
donor's milk. Ped., akush. i gin. 19 no.1:17-20 '57. (MIRA 13:1)

1. Kafedra gigiyeny pishchevareniya (zav. - prof. I.P. Barchenko)  
Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta  
im. akad. A.A. Bogomol'tsa (direktor - prof. Ye.F. Shamray).  
(VITAMINS) (YEAST) (MILK, HUMAN)

KRIZHANOVSKAYA, V.V. [Kryzhaniv's'ka, V.V.], kand.med.nauk; VAYNRUB, E.M.  
[Vainrub, IE.M.], kand.med.nauk; YAKOVENKO, G.I. [Iakovenko, H.I.]  
kand.med.nauk; PRITALYUK, M.S. [Prytaliuk, M.S.], nauchnyy sotrudnik

Daily schedule and work capacity of fifth-grade pupils in connection  
with the introduction of polytechnical training. Ped., akush. i  
gin. 23 no.1:7-10 '61. (MIRA 14:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut kommunal'noy  
gigiyeny (direktor - doktor med. nauk, prof. D.M.Kalyuzhniy).  
(MANUAL TRAINING—HYGIENIC ASPECTS)  
(WORK)

AUTHORS: Tsukanov, E.F., Ivanchenko, P. K. and Molotkov, L.F.,  
Docents, Pavlenko, B. A., Nikolayev, V. A.,  
Krizhanovskiy, A. L. and Kokhno, P. Ya., Engineers

TITLE: Investigation of Loads During Rolling Plates  
(Issledovaniye davleniy pri prokatke listov)

PERIODICAL: Stal', 1958, Nr 4, pp 332-334 (USSR)

ABSTRACT: The measurements of rolling loads endured by rolls in a medium plate mill during rolling plates were carried out. The mill consisted of two stands in line: three rolls (LAUT) for rolling plates and two-rolls for riffling plates. In the three roll mill 670 x 517 x 670 mm for rolling smooth plates cast iron rolls with a chilled surface are used and for riffling plates, forged steel rolls (50 KhG). The length of rolls 1800 mm. In the two roll stand in which only one pass is made for riffling, cast iron rolls of 650 mm diameter with chilled surface are used. The mill is powered with a 900 h.p. motor. Riffling plate was rolled in 10-12 passes and smooth plates in 11-13 passes. Measurements of loads on rolls were carried out during rolling plates (dimensions in Table 1) and the most characteristic results are given Card 1/2 in Table 2. Experimental results are compared in Figs.1-3.

Investigation of Loads During Rolling Plates 133-58-4-17/40

Conclusions: During intensive reductions in cast iron chilled rolls stresses are formed considerably exceeding the permissible ones. Specific load on rolls 5-6 kg/mm<sup>2</sup> at the beginning of rolling increases at the end of rolling to 28-30 kg/mm<sup>2</sup>. During rolling on steel rolls the specific load is higher than on rolling on cast iron rolls (due to an increase in friction in the former case). During rolling comparatively thin products ( $H < 33$  mm) the maximum specific pressure was observed at reductions of 34-40%. With further increase in reduction the specific load decreases.

There are 2 tables, 3 figures and 3 references, all of which are Soviet.

ASSOCIATIONS: Dneprodzerzhinskiy vecherniy metallurgicheskiy institut (Dneprodzerzhinsk: Evening Metallurgical Institute) and zavod im. Dzerzhinskogo (Works imeni Dzerzhinskiy)

1. Rolling mills--Operation 2. Plates--Rolling 3. Rolling mills--Stresses

Card 2/2

KRIZHANOVSKIY, A.S.

Useful and necessary method. Avtom. telem. i svias' 3 no.4:28 Ap  
'59. (MIRA 12:5)

1. Starshiy elektromekhanik Ventpilseskoj distantsii signalizatsii i  
svyazi latviyskoj dorogi.  
(Railroads--Signaling)



L 24242-66 EWT(m) DIAAP

ACC NR: AP6014616

SOURCE CODE: UR/0386/66/003/009/0382/0384

AUTHOR: Krizhanskiy, L. M.; Rogozev, B. I.; Popov, G. V.

ORG: none

TITLE: On the sign of the change of the charge radius of the  $\text{Sn}^{119}$  nucleus

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 9, 1966, 382-384

TOPIC TAGS: Mossbauer effect, line shift, excited state, resonance line, barium titanate, tin, solid solution, paraelectricity, ferroelectricity

ABSTRACT: The authors used the nuclear-gamma-resonance spectroscopy method to investigate the behavior of  $\text{Ba}(\text{Ti}, \text{Fe})\text{O}_3$  solid solutions in the region of transition from the paraelectric into the ferroelectric state. From an analysis of the data on the temperature dependence of the chemical shift in the absorption spectra of such solid solution in the transition region, and from a comparison with similar data for  $\text{Ba}(\text{Ti}, \text{Fe})\text{O}_3$  they have also determined the sign of the change in the charge radius of  $\text{Sn}^{119}$ . The investigation was made with the apparatus described in a paper by one of the authors (Krizhanskiy, with Ye. M. Kruglov, ZhETF v. 43, 2050, 1962). The source was tin dioxide. The absorber temperature was varied from room temperature to  $-170^\circ\text{C}$ . A plot of the temperature dependence of the chemical shift in the spectra of  $\text{Ba}(\text{Ti}_{0.8}, \text{Sn}_{0.2})\text{O}_3$  and  $\text{Ba}(\text{Ti}_{0.7}, \text{Sn}_{0.3})\text{O}_3$  shows that at temperatures above  $-60^\circ\text{C}$  and  $-150^\circ\text{C}$  the corresponding solid solutions are in the paraelectric phase.

Card 1/2

L 24242-66

ACC NR: AP6014616

2

At temperatures -60C and -150C a discontinuity sets in and jumps occur in the value of the chemical shift. These jumps cannot be attributed to the temperature shift and must be interpreted as the consequence of structure (phase) changes in the investigated sample. The change in the chemical shift can be due to distortion of the unit cell and the concomitant change of length and angles of the bonds in the ferroelectric phase transition. It is deduced that during the ferroelectric transition an increase of the electron density occurs also at the  $\text{Sn}^{119}$  nucleus. Since the transition from the paraelectric into the ferroelectric phase is accompanied by an increase in the chemical shift of the absorption line, the change in the charge radius is negative, in accord with other published findings. The authors thank V. A. Bokov for providing the samples and for useful discussions, and A. N. Perevedentsev for help with the work. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 05Mar66/ ORIG REF: 003/ OTH REF: 005

Card 2/2da

BANIT, Feofan Gavrilovich; YAKUBOVICH, Boris Isayevich;  
VOLNYANSKIY, A.K., inzh., retsenzent; VYBORNYY,  
K.R., inzh., retsenzent; KRIZHANOVSKIY, G.S., inzh.,  
retsenzent; ZAYCHIKOVA, E.A., red.; GOL'BERG, T.M.,  
tekhr. red.

[Operating, repairing, and assembling equipment in building materials plants] Ekspluatatsiia, remont i montazh oborudovaniia zavodov stroitel'nykh materialov. Moskva, Stroiizdat, 1964. 234 p. (MIRA 17:3)

"APPROVED FOR RELEASE: 06/14/2000

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826610019-8"

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**APPROVED FOR RELEASE: 06/14/2000**

**CIA-RDP86-00513R000826610019-8"**

700' 15' 18' 20' 22' 24' 26' 28' 30'

KRIZHANOV'S'KIY, O.M.

Determining the fields of value of coefficients of a differential equation on the border of maximum frequencies of natural oscillations in a control system. Dop.AN URSR no.4:328-332 '55.(MIRA 9:2)

1.Institut girnichoï spravi imeni M.M.Fedorova AN URSR. Predstaviv  
diysniy chlen AN URSR O.Yu.Ishlins'kiy.  
(Differential equations) (Automatic control)



KRIZHANOV'S'KIY, O.M.; TIMOSHUK, V.V.

Effect of the cable on the quality of transient processes in a  
system of automatic control for mine hoisting apparatus. Avtomatyka  
no.1:3-17 '57. (MLRA 10:5)

1. Institut gornichoi spravi im. M.M. Fedorova AN URSR.  
(Automatic control) (Elasticity)

05361

SOV/102-59-1-5/12

AUTHORS: Krizhanovs'kiy, O.M., Vrublevs'kiy, V.Y. and  
Soltik, V.Ya.

TITLE: Peak-Holding Control of the Air Blast to a Crucible

PERIODICAL: Avtomatika, 1959, Nr 1, pp 52-57 (USSR)

ABSTRACT: The paper deals with the control of the air blast to crude iron remelted in a crucible, the object of the control being to maximize the temperature. Fig 1 illustrates the object of this operation; it shows the strength and size of the residual graphite as a function of temperature (the metal is cast directly from the crucible). Fig 2 shows how the temperature varies with the air flow rate for several different compositions (not given) of the charge. (The parameters in any case vary with time, since the impurities are burned out.) The simple equations on p 54 relate the temperature  $T$  to the air flow rate  $q$ , and to the derivative  $U$ . Fig 3 illustrates an apparatus used to locate and hold the peak temperature, which varies as burning proceeds; the regulator (developed at the Institute of Electrical Engineering, Academy of Sciences UkrSSR) is of stepping type. The five steps of operation are to measure the

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initial temperature, to store that temperature, to run the servo controlling the blast briefly, to store direction of displacement and finally to compare the new temperature with the previous value. (The instrument is not described fully.) It would appear that the exact parameters of the regulator have yet to be decided from a full-scale experiment. There are 3 figures and 14 Soviet references.

ASSOCIATION: Institut mashinostroyeniya AN URSR (Institute of Machine Research AS UkrSSR)

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AUTHOR: Kryzhanovs'kyi, O.M., and Soltyk, V.Ya.

TITLE: On discontinuous extremum control systems with improved dynamic characteristics

PERIODICAL: Avtomatyka, no. 4, 1960, 1 - 12

TEXT: On the basis of the method proposed for improving the dynamic characteristics of continuous extremum systems, described in O.M. Kryzhanovs'kyi's article (Ref. 3: Izv. AN SSSR, OTN Energetika i avtomatika, no. 6, '1959), the authors propose a method for improving the dynamic characteristics of discontinuous extremum systems. The type of impulse filter described in Ya.Z. Shchipkin (Ref. 4: Teoriya impul'snykh sistem (Theory of Impulse Systems) GIFML, M. 1958) makes it possible to obtain the sensitive element of the considered extremum system with improved dynamic properties in the form

$$u_n = a_0 Q^*(e^{-D}) \left\{ \frac{M^*(e^{-D}) \Delta y_{n-1}}{\Delta x_{n-1}} \right\}. \quad (17)$$

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